U.S. DEPARTMENT OF ENERGY

Center for Interface Science: Solar Electric Materials (CIS:SEM)

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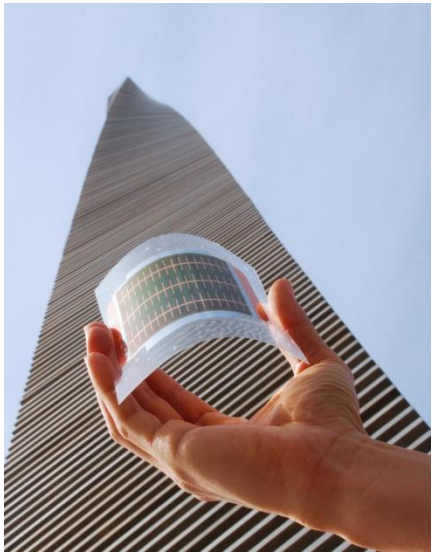
CIS:SEM will become a national resource for:

i) **understanding and controlling the interface science underlying solar energy conversion technologies based on organic and organic-inorganic hybrid materials;**

ii) **inspiring, recruiting and training future scientists and leaders in the basic science of solar electric energy conversion.**



RESEARCH PLAN AND DIRECTIONS

Characterize & control of composition and structure of interfaces between nanostructured organic semiconductors and oxides or metals. Interfaces limit the energy conversion efficiencies and scale-up of Generation III solar cells. New materials and characterization methods will enable scientific understandings that lead to future low-cost solar-electric energy conversion technologies with unprecedented performance .